

## ABSTRACT

A mobile station for a TD-CDMA cellular system includes means for maintaining a list of intracell interferers to the mobile station. Further means (14, 5 16) detect intercell interferers to the mobile station by using handover related information available in the mobile station. Detected intercell interferers that fulfil a predetermined selection criterion are added to the list of interferers. Means (12) are provided for performing interference cancellation for all interferers, both intracell and intercell, in the list with a joint detection 10 algorithm.

(Fig. 2)